

REPORT ON THE X-RAY EXAMINATION OF DYSENTERY AND OTHER CASES

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(Received for publication 20 October, 1916)

Glasson (1915), in a paper on the 'Localization of Dysenteric Ulcers by X-rays,' concludes as follows:—

'In acute cases I do not think radiography will be of much assistance, but in chronic cases it will be of great assistance, both to the physician and surgeon, as it will give a clear picture of areas where the ulcerative patches are situated.

'Before a radiogram is taken, the patient should be given bismuth subnitrate in 60 gr. doses every two hours during the day for at least six days. On the sixth day a radiogram should be taken, then the bismuth should be discontinued and liquid paraffin given in 2 dr. doses every two hours for twenty-four hours. Then a second radiogram should be taken, and this second one will show where any ulcerative patches may be situated.'

The technique followed corresponded exactly to that laid down by Glasson in the paper quoted above.

The cases under observation were three cases of chronic dysentery, one of paratyphoid, and one of malaria.

CASE I. Dysentery. Pioneer K—.

Plate 1. 6th day. Ascending colon, transverse colon, descending colon to level of iliac crest full of bismuth food. All the shadows normal.

Plate 2. 24 hours later after paraffin. Ascending colon emptying, transverse colon full, descending colon full to level of iliac crest. All the shadows exactly as are frequently seen in normal bowel.

Plate 3. 24 hours later—Nothing in the bowel anywhere to indicate bismuth.

CASE 2. Dysentery. Private U—.

Plate 1. 6th day. Ascending colon, transverse colon, both full of the food. Nothing abnormal.

Plate 2. 24 hours later after paraffin. Traces of the food in the ascending colon, the transverse colon, and the descending colon. (There was nothing abnormal in shadows of this kind, and they corresponded in appearance almost exactly with the shadows seen on Plate 3 of Case 4—the control case.)

Plate 3. 24 hours later. A very indefinite trace of food in the hepatic flexure. None elsewhere. The trace in the flexure differs in no way from similar traces frequently seen in the examination of cases not suffering from dysentery.

CASE 3. Dysentery. Sergeant R—.

Plate 1. 6th day. Ascending colon, transverse colon, both full. Nothing abnormal.

Plate 2. 24 hours later after paraffin. Hepatic flexure, transverse colon, descending colon to sigmoid, all full, all normal in appearance.

Plate 3. 24 hours later.—Not a trace of the food anywhere.

CASE 4. Malaria—Control Case. Seaman S—.

Plate 1. 6th day. Ascending colon, transverse colon, and descending colon, all full, all normal in appearance.

Plate 2. 24 hours later after paraffin. Practically no change.

Plate 3. 24 hours later. Traces in the ascending colon, in the transverse colon, and in the first part of the descending colon. (Compare Plate 2 of Case 2.)

CASE 5. Paratyphoid. Private W—.

Plate 1. 6th day. Ascending colon, transverse colon, and descending colon all full and normal.

Plate 2. 24 hours later after paraffin. Food in transverse colon, in descending colon, and in rectum; also traces at the hepatic flexure appearing exactly the same as in Plate 3, Case 2.

Plate 3. 24 hours later. All the food has passed.

The points from the X-ray point of view are:—

1. A study of the illustrations of the original paper shows nothing which might not equally well be seen on plates taken, under similar circumstances, in persons not suffering from dysentery.

This is fully borne out by the plates taken of the series of cases we observed.

2. The shadows arrowed on the illustrations in the paper do not show any difference from shadows which are frequently seen in any X-ray department when bismuth or barium meals are being watched through a bowel.

3. It is a well-known X-ray fact that when kidney cases are to be examined, special care has to be taken when the patient has been taking bismuth in medicinal doses. Even when purgatives are given, traces of bismuth frequently remain here and there in the bowel.

4. Still more important is another fact—disclosed by X-rays. In ulcer of the stomach, bismuth does not adhere to the raw surface of the ulcer, and the X-ray diagnosis of gastric or duodenal ulcer cannot be made from this point of view. The question immediately suggests itself, 'Why, when it is proved beyond any question that bismuth does not adhere to the surfaces of either gastric or duodenal ulcers, should it adhere to ulcers in the large bowel?'

REFERENCE

GLASSON, C. J. (1915). *Proc. Roy. Soc. of Medicine, Med. Sec.*, p. 39.